

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application.

1. (currently amended) An embolic filtering system for use in a body lumen, comprising

a self-expanding strut assembly including ~~a nickel-titanium alloy, wherein the alloy includes a ternary element selected from the group of elements consisting of platinum, palladium, or tantalum, and wherein the alloy further includes a hysteresis curve with a loading plateau at about 100 ksi to 110 ksi and an unloading plateau at about 5 ksi to 100 ksi~~ a superelastic alloy, wherein the superelastic alloy comprises at least one ternary element and exhibits a decreased stress hysteresis due to a lowered loading plateau stress compared to that of the superelastic alloy without the at least one ternary element; and

a filter element disposed on the strut assembly.

2. (original) The embolic filtering system of claim 1, wherein the system includes an elastic sheath at least partially overlying the filter element.

3. (original) The embolic filtering system of claim 2, wherein the self-expanding strut assembly is cut from a tube with truncated diamond shape openings.

4. (original) The embolic filtering system of claim 1, wherein the self-expanding strut assembly when deployed has a generally conical shape with a first

base, and the filter element when deployed has a generally conical shape with a second base, and wherein the first and second bases are joined.

5. (original) The embolic filtering system of claim 1, wherein the self-expanding strut assembly includes a strut pattern that is laser cut from a tube.

6. (original) The embolic filtering system of claim 1, wherein the alloy includes a transition temperature set below human body temperature.

7-14. (canceled).

15. (currently amended) The filtering system of claim ~~[[12]]~~1, wherein the self-expanding strut assembly expands inside the body lumen through shape memory effect.

16. (currently amended) The filtering system of claim ~~[[12]]~~1, wherein the superelastic alloy includes a transition temperature below 45 degrees C.

17. (new) The filtering system of claim 1, wherein the superelastic alloy comprises about 30 to about 52 atomic percent of titanium, the balance of nickel, and up to about 15 atomic percent of the at least one ternary element.

18. (new) The filtering system of claim 1, wherein the at least one ternary element is selected from the group consisting of palladium, platinum, chromium, iron, cobalt, vanadium, manganese, boron, copper, aluminum, tungsten, tantalum, zirconium, and alloys thereof.

19. (new) The filtering system of claim 18, wherein the at least one ternary element is selected from the group consisting of palladium, platinum, tantalum, and alloys thereof.

20. (new) An embolic filtering system for use in a body lumen, comprising a self-expanding strut assembly including a superelastic alloy, wherein the superelastic alloy comprises at least one ternary element and exhibits a decreased stress hysteresis due to a lowered loading plateau stress compared to that of the superelastic alloy without the at least one ternary element;

wherein the superelastic alloy comprises about 30 to about 52 atomic percent of titanium, the balance of nickel, and up to about 15 atomic percent of the at least one ternary element selected from the group consisting of palladium, platinum, tantalum, and alloys thereof; and

a filter element disposed on the strut assembly.